

0.a. Goal

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

0.b. Target

Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

0.c. Indicator

Indicator 8.8.1: Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status

0.d. Series

Non-fatal occupational injuries among employees, by sex and migrant status (per 100,000 employees)

Fatal occupational injuries among employees, by sex and migrant status (per 100,000 employees)

0.e. Metadata update

2022-03-31

0.f. Related indicators

1.3.1, 8.8.2

0.g. International organisations(s) responsible for global monitoring

International Labour Organisation (ILO)

1.a. Organisation

International Labour Organisation (ILO)

2.a. Definition and concepts

Definition:

This indicator provides information on the number of fatal and non-fatal occupational injuries per 100,000 workers in the reference group during the reference period. It is a measure of the personal likelihood or risk of having a fatal or a non-fatal occupational injury for each worker in the reference group.

The number of occupational injuries expressed per a given number of workers in the reference group is also known as the incidence rate of occupational injuries.

Concepts:

Definitions of the main concepts presented below are derived from the Resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the 16th International Conference of Labour Statisticians (ICLS) in 1998

(https://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087528/lang--en/index.htm).

Occupational accident: an unexpected and unplanned occurrence, including acts of violence, arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death. Occupational accidents are to be considered travel, transport or road traffic accidents in which workers are injured and which arise out of or in the course of work; that is, while engaged in an economic activity, or at work, or carrying out the business of the employer.

Occupational injury: any personal injury, disease or death resulting from an occupational accident. An occupational injury is different from an occupational disease, which comes as a result of an exposure over a period of time to risk factors linked to the work activity. Diseases are included only in cases where the disease arose as a direct result of an accident. An occupational injury can be fatal or non-fatal (and non-fatal injuries could entail the loss of workdays).

Fatal occupational injury: an occupational injury leading to death within one year of the day of the occupational accident.

Case of occupational injury: the case of one worker incurring one or more occupational injuries as a result of one occupational accident.

Workers in the reference group: workers in the reference group refer to the average number of workers in the particular group under consideration and who are covered by the source of the statistics on occupational injuries (for example, those of a specific sex or in a specific economic activity, occupation,

region, age group, or any combination of these, or those covered by a particular insurance scheme, accident notification systems, or household or establishment survey).

2.b. Unit of measure

Ratio of cases per 100,000 workers

2.c. Classifications

Migrant status is determined according to country of birth (native-born or foreign-born) or country of citizenship (citizen or non-citizen).

3.a. Data sources

The recommended data sources are different types of administrative records, such as records of national systems for the notification of occupational injuries (labour inspection records and annual reports; insurance and compensation records, death registers), supplemented by household surveys (especially in order to cover informal sector enterprises and the self-employed) and/or establishment surveys.

The metadata should clearly specify (i) whether the statistics relate to cases of occupational injury which have been reported (to an accident notification system or to an accident compensation scheme), compensated (by an accident insurance scheme) or identified in some other way (for example through a survey of households or establishments) and (ii) whether cases of occupational disease and cases of injury due to commuting accidents are excluded from the statistics, as recommended.

3.b. Data collection method

The ILO Department of Statistics processes national household survey microdata sets in line with internationally-agreed indicator concepts and definitions set forth by the International Conference of Labour Statisticians. For data that could not be obtained through this processing or directly from government websites, the ILO sends out an annual ILOSTAT questionnaire to all relevant agencies within each country (national statistical office, labour ministry, etc.) requesting the latest annual data and any revisions on numerous labour market topics and indicators, including many SDG indicators.

3.c. Data collection calendar

Continuous

3.d. Data release calendar

Continuous

3.e. Data providers

Labour ministries, labour inspection, national insurance, and/or national statistical offices

3.f. Data compilers

International Labour Organisation (ILO)

3.g. Institutional mandate

The ILO is the UN focal point for labour statistics. It sets international standards for labour statistics through the International Conference of Labour Statisticians. It also compiles and produces labour statistics with the goal of disseminating internationally-comparable datasets, and provides technical assistance and training to ILO member States to support their efforts to produce high quality labour market data.

4.a. Rationale

This indicator provides valuable information that could be used to formulate policies and programmes for the prevention of occupational injuries, diseases and deaths. It could also be used to monitor the implementation of these programmes and to signal particular areas of increasing risk such as a particular occupation, industry or location. Although the principal objective of this indicator is to provide information for prevention purposes, it may be used for a number of other purposes, such as to identify the occupations and economic activities with the highest risk of occupational injuries; to detect changes in the pattern and occurrence of occupational injuries, so as to monitor improvements in safety and reveal any new areas of risk; to inform employers, employers' organizations, workers and workers' organizations of the risks associated with their work and workplaces, so that they can take an active part in their own safety; to evaluate the effectiveness of preventive measures; to estimate the consequences of occupational injuries, particularly in terms of days lost or costs; and to provide a basis for policymaking aimed at encouraging employers, employers' organizations, workers and workers' organizations to introduce accident prevention measures.

4.b. Comment and limitations

There may be problems of underreporting of occupational injuries, and proper systems should be put in place to ensure the best reporting and data quality. Underreporting is thought to be present in countries at all levels of development but may be particularly problematic in some developing countries. Data users should be aware of this issue when analysing the data. Double-counting of cases of occupational injury may also happen in cases where data from several registries (records kept by different agencies, for example) are consolidated to have more comprehensive statistics.

Because data quality issues may be present, it may be more relevant to analyse indicator trends rather than levels. When measured over a period of time, the data can reveal progress or deterioration in occupational safety and health, and thus point to the effectiveness of prevention measures. This indicator is volatile and strong annual fluctuations may occur due to unexpected but significant accidents or national calamities. The underlying trend should therefore be analysed.

4.c. Method of computation

The incidence rates of fatal and non-fatal occupational injuries will be calculated separately, since statistics on fatal injuries tend to come from a different source than those on non-fatal injuries, which would make their sum into total occupational accidents inaccurate.

The fatal occupational injury incidence rate is expressed per 100,000 workers in the reference group, and thus, is calculated as follows:

$$\text{Fatal occupational injury incidence rate} = \frac{\text{New cases of fatal injury during the reference year}}{\text{Workers in the reference group during the reference year}} \times 100,000$$

Similarly, the non-fatal occupational injury incidence rate is calculated as follows:

$$\text{Non fatal occupational injury incidence rate} = \frac{\text{New cases of non fatal injury during the reference year}}{\text{Workers in the reference group during the reference year}} \times 100,000$$

In calculating the average number of workers, the number of part-time workers should be converted to full-time equivalents. For the calculation of rates, the numerator and the denominator should have the same coverage. For example, if self-employed persons are not covered by the source of statistics on fatal occupational injuries, they should also be taken out of the denominator.

4.d. Validation

The ILO engages in annual consultations with member States through the ILOSTAT questionnaire and related Statistics Reporting System (StaRS). National data providers receive a link to the portal where they can review all national SDG data available on ILOSTAT.

4.e. Adjustments

Not applicable

4.f. Treatment of missing values (i) at country level and (ii) at regional level

Not applicable

4.g. Regional aggregations

Not applicable

4.h. Methods and guidance available to countries for the compilation of the data at the national level

This indicator could come from a variety of sources at the national level, including various kinds of administrative records (insurance records, labour inspection records, etc.), household surveys and establishment surveys.

- ILO Guidebook - Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators (https://www.ilo.org/global/statistics-and-databases/publications/WCMS_647109/lang--en/index.htm)
- ILO Manual – Decent Work Indicators, Concepts and Definitions – Chapter 8, Safe work environment https://www.ilo.org/integration/resources/pubs/WCMS_229374/lang--en/index.htm (second version, page 156)
- Resolution concerning statistics of occupational injuries (resulting from occupational accidents) https://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087528/lang--en/index.htm
- Global database on occupational safety and health legislation – LEGOSH http://www.ilo.org/safework/info/publications/WCMS_217849/lang--en/index.htm
- Occupational injuries statistics from household surveys and establishment surveys https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_173153.pdf
- ILOSTAT (<https://ilostat.ilo.org>)
- ILOSTAT Metadata – Indicator descriptions (<https://ilostat.ilo.org/resources/concepts-and-definitions/description-occupational-injuries/>)

4.i. Quality management

The processes of compilation, production, and publication of data, including its quality control, are carried out following the methodological framework and standards established by the ILO Department of Statistics, in compliance with the information technology and management standards of the ILO.

4.j. Quality assurance

Data consistency and quality checks are regularly conducted for validation of the data before dissemination in the ILOSTAT database.

4.k. Quality assessment

The final assessment of the quality of information is carried out by the Data Production and Analysis Unit of the ILO Department of Department. In cases of doubt about the quality of specific data, these values are reviewed with the participation of the national agencies responsible for producing the data if appropriate. If the issues cannot be clarified, the respective information is not published.

5. Data availability and disaggregation

Data availability:

Data on fatal injuries per 100,000 workers is available for 96 countries and territories. Data on injuries per 100,000 workers is available for 94 countries and territories.

Time series:

The submission covers data from 2000 to 2020.

Disaggregation:

This indicator should be disaggregated by both sex and migrant status.

Wherever possible, it would also be useful to have information disaggregated by economic activity and occupation.

6. Comparability/deviation from international standards

Sources of discrepancies:

The variety of possible sources of data on occupational injuries hinders the comparability of data across countries since each type of source provides information on different specific concepts. Data derived from administrative records are not strictly comparable since they include numerous types of records that follow different rules and are maintained by different agencies. Two main sources of data are records of notifications by employers to the competent authority and insurance records of the authority compensating the victims. These two would clearly yield different results, since it is possible that not all injuries that were compensated to workers were reported by the employer and vice versa. It is also possible that these records have a different geographical coverage or that they cover different economic activities.

When statistics come from an establishment survey, the results would be closer to those from records of notifications made by employers since it is also the employer who provides the establishment survey information. However, establishment surveys tend not to cover the informal sector, establishments of a very small size and sometimes the agricultural sector.

When statistics come from a household survey, their reliability depends heavily on the accuracy of the respondents, who may be subjective in the information given.

7. References and Documentation

- ILO Guidebook - Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators (https://www.ilo.org/global/statistics-and-databases/publications/WCMS_647109/lang--en/index.htm)
- ILOSTAT database: <https://ilostat.ilo.org>
- ILOSTAT Metadata – Indicator Descriptions (<https://ilostat.ilo.org/resources/concepts-and-definitions/description-occupational-injuries/>)
- Decent Work Indicators Manual: https://www.ilo.org/integration/resources/pubs/WCMS_229374/lang--en/index.htm
- Resolution concerning statistics of occupational injuries (resulting from occupational accidents) adopted by the 16th ICLS in 1998: https://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087528/lang--en/index.htm